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10/601,320	06/19/2003	Ye-Kui Wang	944-001.111	6971

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EXAMINER	
TRAN, PHILIP B	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/601,320	WANG, YE-KUI	
	Examiner	Art Unit	
	Philip B. Tran	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/22/03 & 4/1/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-24 of the instant application (10/601,320) are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over some claims of co-pending Application No. 10/848,966 (US 2005/0021814 A1). Although the conflicting claims are not identical, they are not patentably distinct from

each other because modifications are obvious.

Regarding claim 1, claim 1 of U.S. co-pending Application No. 10/848,966 contains every element of claim 1 of the instant application and as such anticipate claim 1 of the instant application.

Regarding claim 2, claim 3 of U.S. co-pending Application No. 10/848,966 contains every element of claim 2 of the instant application and as such anticipate claim 2 of the instant application.

Regarding claim 3, claim 4 of U.S. co-pending Application No. 10/848,966 contains every element of claim 3 of the instant application and as such anticipate claim 3 of the instant application.

Regarding claim 4, claim 5 of U.S. co-pending Application No. 10/848,966 contains every element of claim 4 of the instant application and as such anticipate claim 4 of the instant application.

Regarding claim 5, claim 6 of U.S. co-pending Application No. 10/848,966 contains every element of claim 5 of the instant application and as such anticipate claim 5 of the instant application.

Regarding claim 6, claim 7 of U.S. co-pending Application No. 10/848,966

contains every element of claim 6 of the instant application and as such anticipate claim 6 of the instant application.

Regarding claim 7, claim 8 of U.S. co-pending Application No. 10/848,966 contains every element of claim 7 of the instant application and as such anticipate claim 7 of the instant application.

Regarding claim 8, claim 9 of U.S. co-pending Application No. 10/848,966 contains every element of claim 8 of the instant application and as such anticipate claim 8 of the instant application.

Regarding claim 9, claim 11 of U.S. co-pending Application No. 10/848,966 contains every element of claim 9 of the instant application and as such anticipate claim 9 of the instant application.

Regarding claim 10, claim 12 of U.S. co-pending Application No. 10/848,966 contains every element of claim 10 of the instant application and as such anticipate claim 10 of the instant application.

Regarding claim 11, claim 13 of U.S. co-pending Application No. 10/848,966 contains every element of claim 11 of the instant application and as such anticipate claim 11 of the instant application.

Regarding claim 12, claim 14 of U.S. co-pending Application No. 10/848,966 contains every element of claim 12 of the instant application and as such anticipate claim 12 of the instant application.

Regarding claim 13, claim 15 of U.S. co-pending Application No. 10/848,966 contains every element of claim 13 of the instant application and as such anticipate claim 13 of the instant application.

Regarding claim 14, claim 17 of U.S. co-pending Application No. 10/848,966 contains every element of claim 14 of the instant application and as such anticipate claim 14 of the instant application.

Regarding claim 15, claim 18 of U.S. co-pending Application No. 10/848,966 contains every element of claim 15 of the instant application and as such anticipate claim 15 of the instant application.

Regarding claim 16, claim 19 of U.S. co-pending Application No. 10/848,966 contains every element of claim 16 of the instant application and as such anticipate claim 16 of the instant application.

Regarding claim 17, claim 20 of U.S. co-pending Application No. 10/848,966

contains every element of claim 17 of the instant application and as such anticipate claim 17 of the instant application.

Regarding claim 18, claim 21 of U.S. co-pending Application No. 10/848,966 contains every element of claim 18 of the instant application and as such anticipate claim 18 of the instant application.

Regarding claim 19, claim 22 of U.S. co-pending Application No. 10/848,966 contains every element of claim 19 of the instant application and as such anticipate claim 19 of the instant application.

Regarding claim 20, claim 23 of U.S. co-pending Application No. 10/848,966 contains every element of claim 20 of the instant application and as such anticipate claim 20 of the instant application.

Regarding claim 21, claim 24 of U.S. co-pending Application No. 10/848,966 contains every element of claim 21 of the instant application and as such anticipate claim 21 of the instant application.

Regarding claim 22, claim 26 of U.S. co-pending Application No. 10/848,966 contains every element of claim 22 of the instant application and as such anticipate claim 22 of the instant application.

Regarding claim 23, claim 27 of U.S. co-pending Application No. 10/848,966 contains every element of claim 23 of the instant application and as such anticipate claim 23 of the instant application.

Regarding claim 24, claim 28 of U.S. co-pending Application No. 10/848,966 contains every element of claim 24 of the instant application and as such anticipate claim 24 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus)." ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

It appears that claim 21 would reasonably be interpreted by one of ordinary skill as a system of software per se, failing to fall within a statutory category of invention. As such, a software program alone is not a machine, and it is clearly not a process, manufacture nor composition of matter. Also, claims 22-24 do not resolve the deficiencies of their parent claims. Thus, claims 21-24 are not limited to statutory subject matter and are therefore non-statutory.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srikantan et al (Hereafter, Srikantan), U.S. Pat. Application Pub. No. US 2001/0029548 A1 in view of Boyce, U.S. Pat. No. 5,778,143.

Regarding claim 1, Srikantan teaches a signaling method for use in stream switching among a plurality of bitstreams (= streaming media) [see Srikantan, Abstract and Figs. 1-2]. Srikantan does not explicitly teach the bitstreams containing video data

indicative of a plurality of video frames for each bitstream, wherein the bitstreams comprise at least one switching point so as to allow switching from a first bitstream to a second bitstream at said switching point, and at least one recovery point which defines a first correct or approximately correct picture in output order in the second bitstream decoded subsequent to said stream switching, said method characterized by providing in the bitstreams information indicative of the switching point so that said stream switching can be carried out based on the provided information, wherein the recovery point is different from the switching point.

However, Boyce, in the same field of media transmission endeavor, discloses providing in the bitstreams information indicative of the switching point so that said stream switching can be carried out based on the provided information, wherein the recovery point is different from the switching point [see Boyce, Figs. 1-2 and Abstract and Col. 5, Line 53 to Col. 7, Line 19]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Boyce into the teaching of Srikantan in order to efficiently refresh bitstream representing a series of inter-coded video frames.

Regarding claim 2, Srikantan does not explicitly teach the signaling method of claim 1, wherein each video frame comprises one or more slices and the video frames contain at least one isolated region associated with said one or more slices in the second bitstream decoded subsequent to said stream switching, said method characterized in that the provided information is further indicative of the isolated region.

However, Boyce, in the same field of media transmission endeavor, discloses the provided information is further indicative of the isolated region [see Boyce, Col. 8, Lines 23-41]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Boyce into the teaching of Srikantan for the same reasons set forth above in claim 1.

Regarding claim 3, Srikantan further teaches the signaling method of claim 1, wherein the bitstreams are conveyed from a server device to a client device in a streaming network, said method characterized in that said stream switching is initiated by the server device [see Figs. 1-2].

Regarding claim 4, Srikantan further teaches the signaling method of claim 1, wherein the bitstreams are conveyed from a server device to a client device in a streaming network, said method characterized in that said stream switching is requested by the client device [see Abstract].

Regarding claim 5, Srikantan further teaches the signaling method of claim 1, wherein the signaling method is used in a transmission utilizing Real-time Transport Protocol (RTP) [see Paragraph 0003].

Regarding claim 6, Srikantan further teaches the signaling method of claim 5, wherein a Session Description Protocol (SDP) is used to convey information indicative of characteristics of the first and second bitstreams [see Paragraph 0027].

Regarding claim 7, Srikantan further teaches the signaling method of claim 1, wherein said stream switching is carried out in transmission of the video data based on transmission conditions between a server device and a client device in a streaming network [see Paragraphs 0035-0038].

Claim 8 is rejected under the same rationale set forth above to claim 1. In addition, Srikantan further teaches a streaming server [see srikantan, Figs. 1-2]. Srikantan does not explicitly teach a stream selector for selecting the first bitstream for transmission. However, Boyce, in the same field of media transmission endeavor, discloses a stream selector for selecting the first bitstream for transmission [see Boyce, Figs. 1-4]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Boyce into the teaching of Srikantan for the same reasons set forth above in claim 1.

Claim 9 is rejected under the same rationale set forth above to claim 2.

Claims 10-12 are rejected under the same rationale set forth above to claims 5-7.

Claim 13 is rejected under the same rationale set forth above to claim 1. In addition, Srikantan further teaches at least one streaming client and at least one streaming server for transmitting one of the bitstreams to the streaming client so as to allow the streaming client to reconstruct the video frames based on the transmitted bitstream, wherein the streaming server comprises a stream selector for selecting the first bitstream for transmission and for further selecting the second bitstream [see Srikantan, Figs. 1-2].

Claims 14-19 are rejected under the same rationale set forth above to claims 2-7.

Regarding claim 20, Srikantan does not explicitly teach the streaming system of claim 13, further characterized by a video encoder to convert a video input signal into the video data and means, responsive to the video data, for encoding the video data into the plurality of bitstreams. However, Boyce, in the same field of media transmission endeavor, discloses a video encoder to convert a video input signal into the video data and means, responsive to the video data, for encoding the video data into the plurality of bitstreams [see Boyce, Figs. 1-4]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Boyce into the teaching of Srikantan for the same reasons set forth above in claim 1.

Claim 21 is rejected under the same rationale set forth above to claim 1.

Claim 22 is rejected under the same rationale set forth above to claim 2.

Claim 23 is rejected under the same rationale set forth above to claim 6.

Claim 24 is rejected under the same rationale set forth above to claim 7.

Other References Cited

7. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Krishnamurthy et al, U.S. Pat. No. 6,304,295.

B) Ohki et al, U.S. Pat. No. 5,361,096.

C) Chen et al, U.S. Pat. No. 6,940,904.

D) Kim et al, U.S. Pat. No. 7,133,451.

E) Wang et al, U.S. Pat. No. 6,570,922.

F) Brightwell et al, U.S. Pat. No. 6,831,949.

G) Satoda, U.S. Pat. Application Pub. No. US 2002/0147980 A1.

8. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (571) 273-8300. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip Tran

PHILIP TRAN
PRIMARY EXAMINER

Art Unit 2155
June 08, 2007